Notice of Allowability	Application No.	Applicant(s)  HYDE ET AL.	
	10/624,632		
	Examiner	Art Unit	
	Igor Kershteyn	3745	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in or other appropriate commercer GHTS. This application is	in this application. If not inclu- nunication will be mailed in due	ded e course. <b>THIS</b>
1. This communication is responsive to	•		
2. The allowed claim(s) is/are <u>1-21</u> .			
3. $\boxtimes$ The drawings filed on $\underline{07/23/2003}$ are accepted by the Exam	miner.		
<ul> <li>4. Acknowledgment is made of a claim for foreign priority una a) All b) Some* c) None of the: <ol> <li>Certified copies of the priority documents have</li> <li>Certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> </ol> </li> <li>* Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMI</li> </ul>	been received. been received in Application uments have been receive of this communication to file	on No ed in this national stage applic	
<ul> <li>THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.</li> <li>5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which gives</li> </ul>	tted. Note the attached EX s reason(s) why the oath o	AMINER'S AMENDMENT or declaration is deficient.	NOTICE OF
6. $\square$ CORRECTED DRAWINGS ( as "replacement sheets") must	be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached			
1)  hereto or 2)  to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR 1.8 each sheet. Replacement sheet(s) should be labeled as such in the	34(c)) should be written on t e header according to 37 Cl	he drawings in the front (not th	e back) of
<ol> <li>DEPOSIT OF and/or INFORMATION about the depos attached Examiner's comment regarding REQUIREMENT F</li> </ol>	it of BIOLOGICAL MAT OR THE DEPOSIT OF BIO	ERIAL must be submitted. OLOGICAL MATERIAL.	Note the
Attachment(s)	_		
1. Notice of References Cited (PTO-892)		formal Patent Application (PT	O-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	Paper No.	ummary (PTO-413), /Mail Date	•
<ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date</li> </ol>	3), 7. Examiner's	Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit		Statement of Reasons for Alle	owance
of Biological Material	9. 🗌 Other	<u>-</u> ·	

## Reasons for allowance

The following is an examiner's statement of reasons for allowance:

The instant invention is deemed to be directed to an unobvious improvement to a turbine bucket over U.S. Patent No. 6,722,852 which teaches a turbine bucket including a bucket airfoil having an airfoil shape, said airfoil having a nominal profile substantially in accordance with Cartesian coordinate values of X, Y and Z wherein the Z values are non-dimensional values convertible to Z distances in inches by multiplying the Z values by a height of the airfoil in inches, and wherein X and Y are distances in inches which, when connected by smooth continuing arcs, define airfoil profile sections at each distance Z, the profile sections at the Z distances being joined smoothly with one another to form a complete airfoil shape.

The improvement comprises coordinate values of X, Y and Z set forth in Table I wherein the Z values are non-dimensional values from 0 to 0.938.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## **Prior Art**

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consist of four patents.

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Wedlake et al. (6,461,109) is cited to show a turbine bucket including a bucket airfoil having an airfoil shape but fails to teach coordinate values of X, Y and Z set forth in Table I wherein the Z values are non-dimensional values from 0 to 0.938.

Pirolla et al. (6,474,948) is cited to show a turbine bucket including a bucket airfoil having an airfoil shape but fails to teach coordinate values of X, Y and Z set forth in Table I wherein the Z values are non-dimensional values from 0 to 0.938.

Wedlake et al. (6,722,852) is cited to show a turbine bucket including a bucket airfoil having an airfoil shape but fails to teach coordinate values of X, Y and Z set forth in Table I wherein the Z values are non-dimensional values from 0 to 0.938.

Bielek et al. (6,739,838) is cited to show a turbine bucket including a bucket airfoil having an airfoil shape but fails to teach coordinate values of X, Y and Z set forth in Table I wherein the Z values are non-dimensional values from 0 to 0.938.

## **Contact information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is (703) 308 8317. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on (703) 308 1044. The fax number is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

ΙK

October 26, 2004

Igor Kershteyn Patent examiner. Art Unit 3745

EDWARD K. LOOK SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700

10/27/09